

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 105796 a/ds	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2004/012144	International filing date (<i>day/month/year</i>) 27 October 2004 (27.10.2004)	Priority date (<i>day/month/year</i>) 27 October 2003 (27.10.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant GSF-FORSCHUNGSZENTRUM FÜR UMWELT UND GESUNDHEIT		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
 2. This REPORT consists of a total of 7 sheets, including this cover sheet.
- In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	Date of issuance of this report 01 May 2006 (01.05.2006) Authorized officer <p style="text-align: center; font-weight: bold;">Agnes Wittmann-Regis</p> Telephone No. +41 22 338 89 70
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 31 MAR 2005

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To:

see form PCT/ISA/220

6/5

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/012144

International filing date (day/month/year)
27.10.2004

Priority date (day/month/year)
27.10.2003

International Patent Classification (IPC) or both national classification and IPC
A01G31/00

Applicant
GSF-FORSCHUNGSZENTRUM FÜR UMWELT UND GESUNDHEIT

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/012144

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/012144

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or
Industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	2,3,6,7,9-17,20,21,27,29-35
	No: Claims	1,4,5,8,18,19,22-26,28
Inventive step (IS)	Yes: Claims	9-17,20,21,29-35
	No: Claims	1-8,18,19,22-28
Industrial applicability (IA)	Yes: Claims	1-35
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

- 1 Reference is made to the following document:

D1 : DE 195 41 470 A1 (IUP INSTITUT FUER UMWELTPFLEGE AG, ITTIGEN, CH)
15 May 1996 (1996-05-15)

2 **INDEPENDENT CLAIM 1**

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.
Document D1 (see claims, figure 3 and column 3, lines 10-13) discloses (the references in parentheses applying to this document):

A method for culturing plant material, comprising:

- (a) forming a layer of floatable granular substrate (4) in a culturing vessel (1);
- (b) placing plant material on or in said layer;
- (c) culturing the plant material in the presence of a culture medium (3), wherein there is no additional structure supporting the plant material from underneath, wherein said floatable granular substrate (4) comprises particles having a size of 10 to 20 mm.

- 2.2 Therefor, it appears that all the features of claim 1 are known from this document D1 and, consequently, the subject-matter of this claim can not be considered as new.

3 **INDEPENDENT CLAIM 22**

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 22 is not new in the sense of Article 33(2) PCT.
Document D1 (see claims, figure 3 and column 3, lines 10-13) also discloses (the references in parentheses applying to this document):

A culturing kit for culturing plant material, comprising a floatable granular substrate (4) and a culturing vessel (1), wherein said floatable granular substrate (4) comprises particles having a size of 10 to 20 mm.

- 3.2 Therefor, it appears that all the features of claim 22 are known from this document D1 and, consequently, the subject-matter of this claim can not be considered as new.

4 **INDEPENDENT CLAIM 24**

- 4.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 24 is not new in the sense of Article 33(2) PCT.

Document D1 also implicitly discloses a method of culturing plant material, comprising the use of a culturing kit according to claim 22.

- 4.2 Therefor, it appears that all the features of claim 24 are known from this document D1 and, consequently, the subject-matter of this claim can not be considered as new.

5 INDEPENDENT CLAIM 25

- 5.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 25 is not new in the sense of Article 33(2) PCT.

Document D1 also implicitly discloses the use of a floatable granular substrate for culturing plant material, wherein said floatable granular substrate comprises particles having a size of 10 to 20 mm.

- 5.2 Therefor, it appears that all the features of claim 25 are known from this document D1 and, consequently, the subject-matter of this claim can not be considered as new.

6 DEPENDENT CLAIMS 4, 5, 8, 18, 19, 23, 26, 28

Dependent claims 4, 5, 8, 18, 19, 23, 26 and 28 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), for the following reason:

The subject-matters of those claims are also anticipated by document D1 (see claims, figure 3 and column 3, lines 10-13).

7 DEPENDENT CLAIMS 2, 3, 6, 7, 27

Dependent claims 2, 3, 6, 7 and 27 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), the reasons being as follows:

Those claims relate to minor constructional, material or functional features, which are partly revealed in the prior art quoted in the search report or which form part of the normal consideration of the person skilled in the art, i.e. they are the result of routine engineering and do not constitute an inspired design. Therefore they do not appear to contain any additional features which involve an inventive step when combined with the subject matter of any claim to which they refer.

8 DEPENDENT CLAIMS 9-17, 20, 21, 29-35

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2004/012144

The combination of the features of dependent claims 9-17, 20, 21 and 29-35 are neither known from, nor rendered obvious by, the available prior art.